

## LIMITED WARRANTY

DB DRIVE warrants the OKUR amplifiers for a period of 1 year from the date of original sales invoice. This warranty applies to the original purchase only. The OKUR amplifiers must be purchased directly from an authorized DB Drive dealer or DB Research.

This limited warranty does not extend to units that have been subjected to misuse, abuse, neglect, or accident. Products that in DB DRIVE's judgment shows evidence of having been altered, modified, abused or serviced without DB DRIVE's authorization, will be ineligible under this warranty. The original sales invoice must be presented at the time any warranty claim is made. All OKUR amplifiers returned for warranty will be inspected before any warranty agreement is issued.

For any questions about the warranty service please contact DB Research.



**DB Research L.L.P.**  
302 Hanmore Industrial Parkway // Harlingen, TX 78550  
® ph: 877.787.0101 // [www.dbdrive.net](http://www.dbdrive.net)



**OKUR**

**A4 4100, A4 4200, A4 1800D, A4 2400D  
A4 PRO1600, A4 PRO2800, A4 PRO3600**

# User Manual

Installation Instructions/Owner's Manual

[www.dbdrive.net](http://www.dbdrive.net)

DUE TO CONTINUOUS IMPROVEMENT OF THE PRODUCT THE SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



## INTRODUCTION

Congratulations on your purchase of a DB DRIVE state-of-the-art power amplifier. Your selection of a DB DRIVE product indicates a true appreciation of fine musical reproduction. Whether adding to an existing system or including your DB DRIVE amplifier in a new system, you are certain to notice immediate performance benefits.

## KEEP YOUR SALES RECEIPT

Take this time to attach your sales receipt to the manual and put in a safe place. In case of any unforeseen reason this product may need warranty service, your receipt will be necessary to establish purchase date.

## RECOMMENDATION

A power amplifier's performance is only as good as its installation. Proper installation will maximize the system's overall performance. It is recommended that you have our product installed by an authorized DB DRIVE retailer. However, if you decide to install it yourself, please carefully read through this manual and take your time to do a quality installation.

Due to continuing product improvements and possible manual revisions, we recommend checking our website for latest product information at [www.dbdrive.net](http://www.dbdrive.net)

**IMPORTANT!** Before making any connections, disconnect the car's battery until the installation is completed to avoid possible damage to the electrical system.

## WARNING!

**Exposure to high power sound systems can cause hearing loss or damage. Listening to your system at loud levels while driving, will impair your ability to hear traffic sounds and emergency vehicles. Use common sense when listening to your system.**



## SAFETY PRECAUTIONS

### **Fuse Amplifiers Power Wire At The Battery.**

Be sure to fuse the power wire within 12" of the car's battery. This will protect the car's battery in case of a short circuit between the power amplifier and battery. THIS IS A MUST, the amplifier's built-in fuse will only protect the power amplifier not the car's battery!

### **Use High Grade Wire Connectors.**

To ensure maximum power transfer and secure safe connections, it is recommended to use high grade barrier spades (for connection at amplifier) and terminal rings (for connection at battery).

### **Do Not Run Any Wires Underneath Vehicle.**

Exposed wires have a chance of being cut or damaged. It is best to run all wires through the vehicle under the carpet and/or side panels. This lends to a cleaner installation and less risk of damage.

### **Use Caution When Mounting Amplifier.**

Remember there are many electrical wires, gas lines, vacuum lines, brake lines as well as a gas tank in the automobile. Make sure you know where they are when mounting the amplifier to avoid puncturing lines, shorting wires or drilling holes in the gas tank.

### **Run Signal Wires Away From Electrical Wires.**

To avoid possibility of induced noise from the car's electrical system (i.e. popping noises or engine noise), run wires away from the car's electrical wiring.

### **Make All Ground Wires As Short As Possible And At The Same Point**

In order to reduce the chance of ground loops (i.e. engine noise), make the grounding wire as short as possible to reduce the wire's resistance. Also, when using multiple components, make sure all units are grounded at the same point.

### **Avoid Sharp Edges When Running The Wires.**

To avoid the possibility of power, signal or speaker shorts, be careful not to allow the amplifier's wires to come in contact with sharp edges. Use a grommet to protect the wire when running through the fire wall.

## FEATURES AND BENEFITS

### **DC Offset Protection**

This circuit protects the output of the amplifier against DC voltage. If for some reason DC voltage is detected at the output stage, the amplifier will shut down protecting the speakers from direct current.

### **Short Circuit Protection**

The circuit protects the amplifier from damage due to a short found in the speakers or wiring. If one of the speakers or its wiring comes in contact with ground, the amplifier will shut down. To resume normal operation, correct the problem and turn the head unit off, then back on. The amplifier will reset and play again.

### **Thermal Protection**

To protect the amplifier circuitry against damage caused by prolonged exposure to high temperatures, a thermal protection circuit is activated if the amplifier reaches excessively high operating temperature. Once the thermal circuit is activated, the amplifier will shut down to cool off. The amplifier will automatically turn back on once it cools down to a safe operating temperature.

### **Power/Protect Indicator**

The power L.E.D. Illuminates green when the amplifier is on and receiving power. The protect L.E.D. Illuminates red when the amplifier has gone into protection mode.

### **Built-in Crossover**

The DB DRIVE amplifiers include a built-in variable \*\*high and low pass crossovers. The crossover features a variable frequency selection for precise high or low pass filtering.

### **Bass EQ**

For added low frequency performance the amplifiers are equipped with 0~12dB bass boost @ 45Hz.

### **2 Ohm Stereo Capability**

A4 4100 .....	2 Ohm Stereo Capability
A4 4200 .....	2 Ohm Stereo Capability
A4 PRO1600 .....	2 Ohm Stereo Capability
A4 PRO2800 .....	2 Ohm Stereo Capability
A4 PRO3600 .....	2 Ohm Stereo Capability

### **1 Ohm Mono Capability**

A4 1800D .....	1 Ohm Mono Capability
A4 2400D .....	1 Ohm Mono Capability

### **Line Out**

One set of full range line outputs have been provided for convenient connection to additional amplifiers in the system.

### **Power Fusing**

This protects the amplifier against short circuits and excessive current.

### **Remote Turn-on**

Automatically turns amplifier on when connected to the head unit's remote output. The amplifier will turn on and off with the head unit to save current consumption. This control also operates the reset circuit for the amplifier's protection. It must be connected with the head unit in order to reset protection circuits.

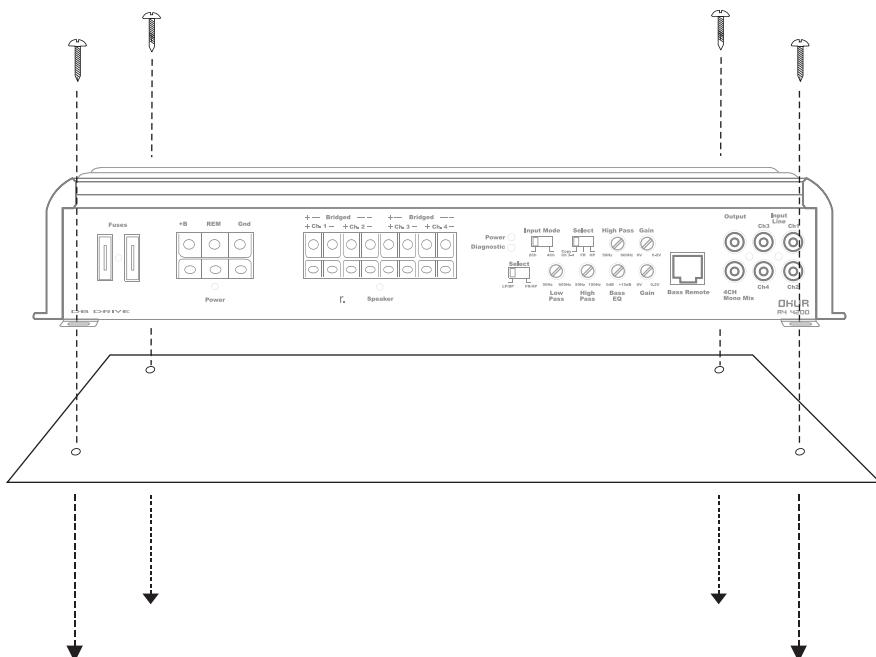
### **Adjustable Input Sensitivity**

Allows you to fine-tune the level matching between your source and the power amplifier.

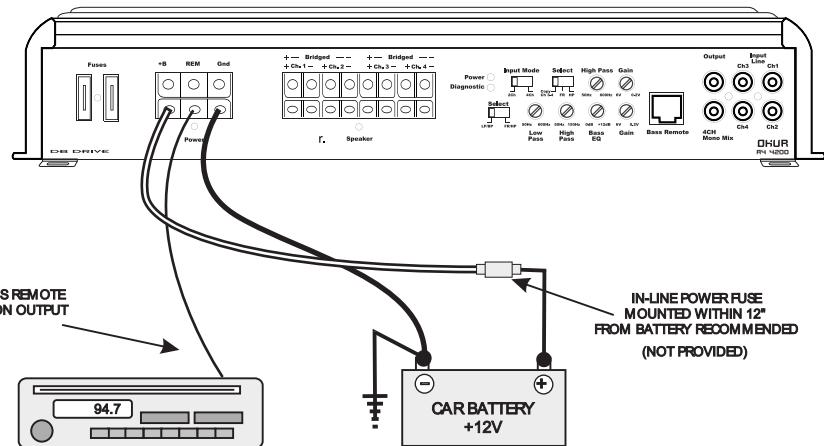
## MOUNTING LOCATION

Before you start the installation, it will be necessary to find a mounting location for the amplifier. Find a location in which the amplifier will receive adequate ventilation in order to dissipate the heat it develops during operation. Two popular mounting locations are in the trunk or under the seat.

Select the location in which you wish to mount the amplifier. Use caution when mounting amplifier, there are many wires, gas lines, vacuum lines, brake lines as well as a gas tank in the automobile. Make sure you know where they are when mounting the amplifier to avoid puncturing lines, shorting wires or drilling holes in the gas tank. Once you are ready, use a pencil to mark the mounting holes in the bottom panel. After you have marked the locations of the holes move amplifier out of the way and drill small starter holes to make the tapping screws easier to install. Use provided screws to tighten down the amplifier.



## POWER CONNECTIONS



**IMPORTANT!** Before making any connections, disconnect the car's battery until the installation is completed to avoid possible damage to the electrical system.

### Connect The Amplifier To The Car's Battery.

At times, the amplifier will need to draw large levels of current that cannot be provided by any circuit in the car's fuse box. We recommend using a 4 to 8 gauge power wire for your connections depending on the amplifier and length of the wire. Strip one end of the wire and prepare for connection. Loosen the terminal on the amplifier marked "+12Volt" and insert wire and then securely tighten. Use caution to make sure no stray wire stands come in contact with surrounding terminals causing short circuits. Run the wire directly to the positive terminal of the car's battery. Make sure to use an in-line fuse within 12" of the car's battery to protect the electrical system and amplifier against short circuits and/or power surges.

### Connect The Ground Terminal Of The Amplifier To The Car's Chassis.

For the ground connection, use a 4 to 8 gauge wire (black) to connect to the terminal marked "Ground" and then connect it to the car's chassis. Try to keep the length of the cable as short as possible, preferably less than 6". Also make sure that the point on the car where the connection is to be made is free of paint and dirt.

### Connect The Remote Terminal Of The Amplifier To A Switchable +12v Source.

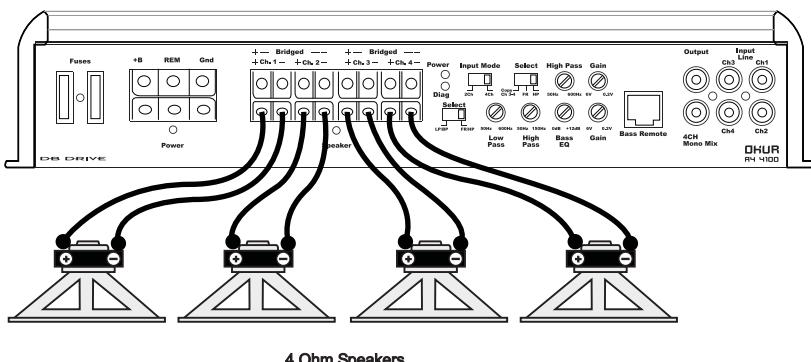
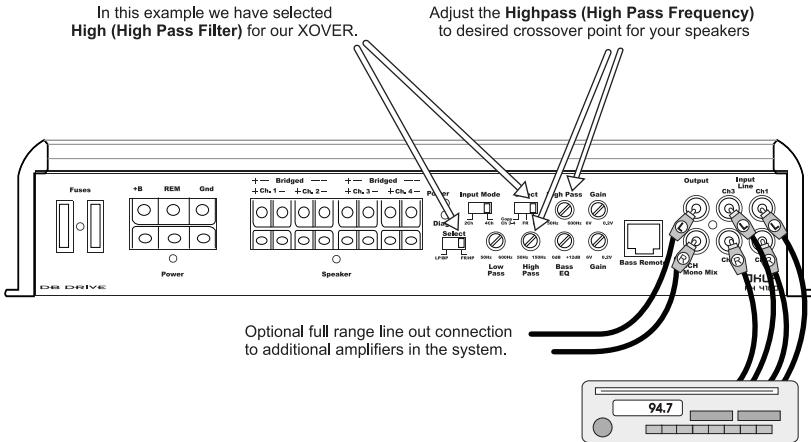
This connection allows the amplifier to be turned on and off with the power control of the radio. If the radio has a remote output terminal, connect it to the amplifier's terminal marked "REMOTE" and prepare for connection (using a 16 gauge wire or heavier). Now when the radio is turned on, the amplifier will automatically turn on. This connection can also be made to the radio's Power Antenna wire.

## SIGNAL & SPEAKER CONNECTIONS

Connect the **RCA output** of the head unit (AM/FM cassette player, CD, or DA) to the **RCA input terminals** of the amplifier.

To make these connections, we recommend high quality **RCA cables**, which are available at your local car audio retailer. Run signal wires away from electrical wires to avoid possibility of induced noise from the car's electrical system (i.e. popping noises or engine noise). Please note that when making these connections the signal inputs correspond with the speaker outputs.

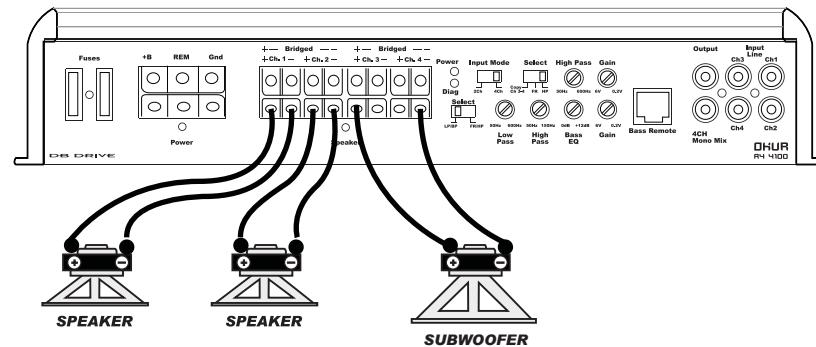
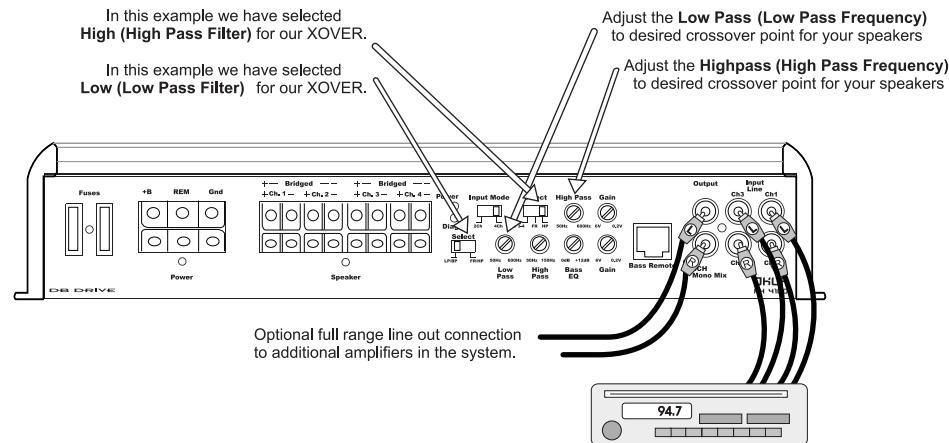
## A4 4100 , A4 4200 CONNECTIONS ( 4 Ch. STEREO MODE )



## A4 4100, A4 4200 CONNECTIONS (3 Ch.TRI MODE )

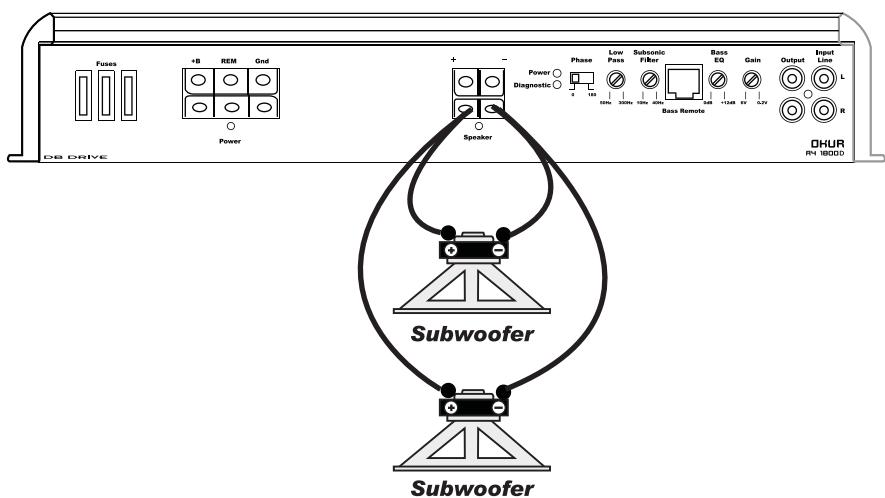
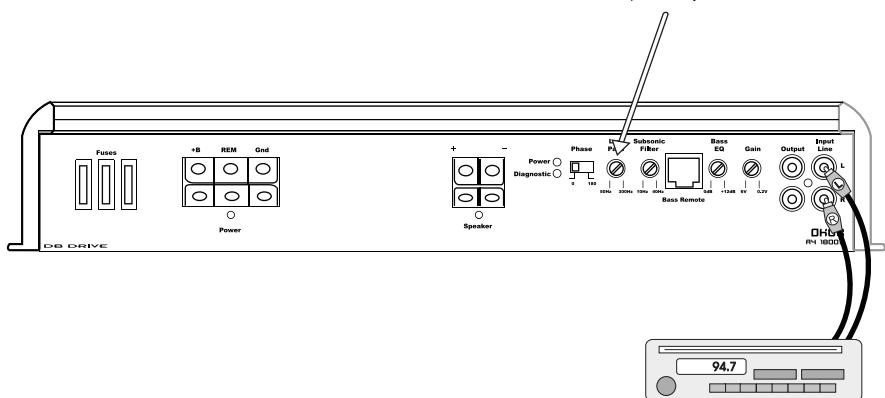
In this example we have selected **High (High Pass Filter)** for our XOVER.

In this example we have selected **Low (Low Pass Filter)** for our XOVER.



**A4 1800D , A4 2400D CONNECTIONS**

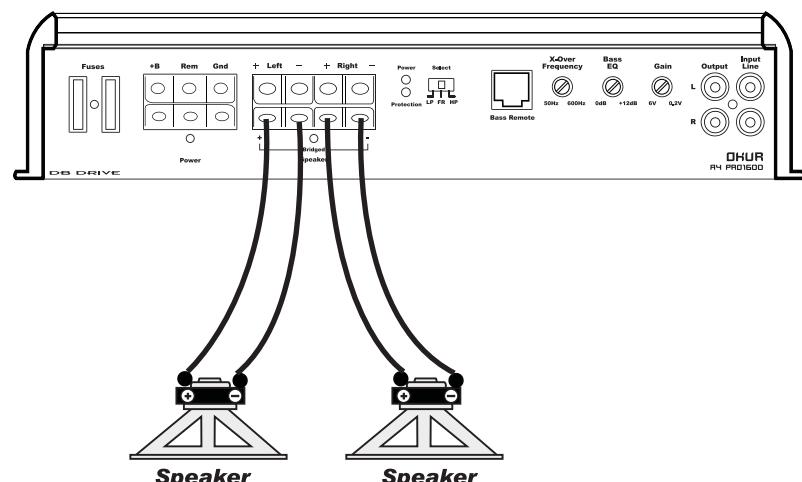
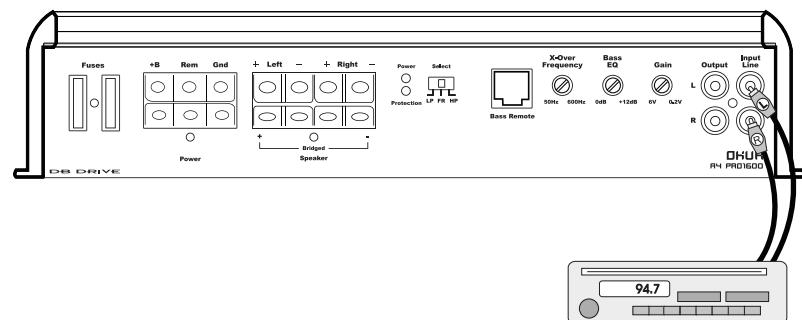
Adjust the **Low Pass (Low Pass Frequency)**  
to desired crossover point for your subwoofers



**1 Ohm Minimum Load**

**PROAUDIO AMPLIFIER CONNECTIONS**

**A4 PRO1600, A4 PRO2800, A4 PRO3600**





## A4 4100 Features and Specs

### FEATURES

CLASS "AB" CIRCUITRY  
 AUDIOPHILE GRADE COMPONENTS  
 HIGH EFFICIENCY MOSFET DESIGN  
 FULLY VARIABLE FRONT AND REAR HIGH PASS/LOW PASS X-OVER  
 CONVENIENT ONE SIDE CONNECTIONS  
 FORCED FAN COOLING  
 ELECTRONIC DC- OFFSET AND THERMAL PROTECTION  
 BRIDGEABLE  
 2 OHMS STEREO CAPABILITY

### SPECIFICATIONS

RATED POWER 14.4 VOLTS	4 X 100 WATTS @ 4 OHMS
RATED POWER 14.4 VOLTS	4 X 200 WATTS @ 2 OHMS
RATED POWER 14.4 VOLTS	2 X 400 WATTS @ 4 OHMS
BANDWIDTH	20 - 28KHz
X-OVER SLOPE	12 dB
VARIABLE BASS BOOST @45 HZ	12 dB
INPUT SENSITIVITY	.250MV-5V
INPUT VOLTAGE	11 - 14.4VOLTS
SIGNAL TO NOISE RATIO	>91 dB
THD AT RATED POWER	< 0.05%

## A4 1800D Features and Specs

### FEATURES

CLASS "AB" CIRCUITRY  
 AUDIOPHILE GRADE COMPONENTS  
 HIGH EFFICIENCY MOSFET DESIGN  
 FULLY VARIABLE LOW PASS X-OVER  
 CONVENIENT ONE SIDE CONNECTIONS  
 FORCED FAN COOLING  
 ELECTRONIC DC- OFFSET AND THERMAL PROTECTION  
 1 OHMS MONO CAPABILITY

### SPECIFICATIONS

RATED POWER 14.4 VOLTS	1 X 1800 WATTS @ 1 OHMS
RATED POWER 14.4 VOLTS	1 X 900 WATTS @ 2 OHMS
RATED POWER 14.4 VOLTS	1 X 450 WATTS @ 4 OHMS
BANDWIDTH	20 - 300Hz
X-OVER SLOPE	12 dB
VARIABLE BASS BOOST @45 HZ	12 dB
INPUT SENSITIVITY	.250MV-5V
INPUT VOLTAGE	11 - 14.4VOLTS
SIGNAL TO NOISE RATIO	>98 dB
THD AT RATED POWER	< 0.05%

## A4 4200 Features and Specs

### FEATURES

CLASS "AB" CIRCUITRY  
 AUDIOPHILE GRADE COMPONENTS  
 HIGH EFFICIENCY MOSFET DESIGN  
 FULLY VARIABLE FRONT AND REAR HIGH PASS/LOW PASS X-OVER  
 CONVENIENT ONE SIDE CONNECTIONS  
 FORCED FAN COOLING  
 ELECTRONIC DC- OFFSET AND THERMAL PROTECTION  
 BRIDGEABLE  
 2 OHMS STEREO CAPABILITY

### SPECIFICATIONS

RATED POWER 14.4 VOLTS	4 X 200 WATTS @ 4 OHMS
RATED POWER 14.4 VOLTS	4 X 400 WATTS @ 2 OHMS
RATED POWER 14.4 VOLTS	2 X 800 WATTS @ 4 OHMS
BANDWIDTH	20 - 28KHz
X-OVER SLOPE	12 dB
VARIABLE BASS BOOST @45 HZ	12 dB
INPUT SENSITIVITY	.250MV-5V
INPUT VOLTAGE	11 - 14.4VOLTS
SIGNAL TO NOISE RATIO	>91 dB
THD AT RATED POWER	< 0.05%

## A4 2400D Features and Specs

### FEATURES

CLASS "AB" CIRCUITRY  
 AUDIOPHILE GRADE COMPONENTS  
 HIGH EFFICIENCY MOSFET DESIGN  
 FULLY VARIABLE LOW PASS X-OVER  
 CONVENIENT ONE SIDE CONNECTIONS  
 FORCED FAN COOLING  
 ELECTRONIC DC- OFFSET AND THERMAL PROTECTION  
 1 OHMS MONO CAPABILITY

### SPECIFICATIONS

RATED POWER 14.4 VOLTS	1 X 2400 WATTS @ 1 OHMS
RATED POWER 14.4 VOLTS	1 X 1200 WATTS @ 2 OHMS
RATED POWER 14.4 VOLTS	1 X 600 WATTS @ 4 OHMS
BANDWIDTH	20 - 300Hz
X-OVER SLOPE	12 dB
VARIABLE BASS BOOST @45 HZ	12 dB
INPUT SENSITIVITY	.250MV-5V
INPUT VOLTAGE	11 - 14.4VOLTS
SIGNAL TO NOISE RATIO	>98 dB
THD AT RATED POWER	< 0.05%

## A4 PRO1600 Features and Specs

### FEATURES

CLASS "AB" CIRCUITRY  
AUDIOPHILE GRADE COMPONENTS  
HIGH EFFICIENCY MOSFET DESIGN  
FULLY VARIABLE FRONT AND REAR HIGH PASS/LOW PASS X-OVER  
CONVENIENT ONE SIDE CONNECTIONS  
FORCED FAN COOLING  
ELECTRONIC DC- OFFSET AND THERMAL PROTECTION  
BRIDGEABLE  
2 OHMS STEREO CAPABILITY

### SPECIFICATIONS

RATED POWER 14.4 VOLTS	2 X 180 WATTS @ 4 OHMS
RATED POWER 14.4 VOLTS	2 X 360 WATTS @ 2 OHMS
RATED POWER 14.4 VOLTS	1 X 750 WATTS @ 4 OHMS
BANDWIDTH	20 - 28KHz
X-OVER SLOPE	12 dB
VARIABLE BASS BOOST @45 HZ	12 dB
INPUT SENSITIVITY	.250MV-5V
INPUT VOLTAGE	11 - 14.4VOLTS
SIGNAL TO NOISE RATIO	>93 dB
THD AT RATED POWER	< 0.05%

## A4 PRO2800 Features and Specs

### FEATURES

CLASS "AB" CIRCUITRY  
AUDIOPHILE GRADE COMPONENTS  
HIGH EFFICIENCY MOSFET DESIGN  
FULLY VARIABLE FRONT AND REAR HIGH PASS/LOW PASS X-OVER  
CONVENIENT ONE SIDE CONNECTIONS  
ELECTRONIC DC- OFFSET AND THERMAL PROTECTION  
BRIDGEABLE  
2 OHMS STEREO CAPABILITY

### SPECIFICATIONS

RATED POWER 14.4 VOLTS	2 X 440 WATTS @ 4 OHMS
RATED POWER 14.4 VOLTS	2 X 880 WATTS @ 2 OHMS
RATED POWER 14.4 VOLTS	1 X 1800 WATTS @ 4 OHMS
BANDWIDTH	20 - 28KHz
X-OVER SLOPE	12 dB
VARIABLE BASS BOOST @45 HZ	12 dB
INPUT SENSITIVITY	.250MV-5V
INPUT VOLTAGE	11 - 14.4VOLTS
SIGNAL TO NOISE RATIO	>93 dB
THD AT RATED POWER	< 0.05%

## A4 PRO3600 Features and Specs

### FEATURES

CLASS "AB" CIRCUITRY  
AUDIOPHILE GRADE COMPONENTS  
HIGH EFFICIENCY MOSFET DESIGN  
FULLY VARIABLE FRONT AND REAR HIGH PASS/LOW PASS X-OVER  
CONVENIENT ONE SIDE CONNECTIONS  
ELECTRONIC DC- OFFSET AND THERMAL PROTECTION  
BRIDGEABLE  
2 OHMS STEREO CAPABILITY

### SPECIFICATIONS

RATED POWER 14.4 VOLTS	2 X 750 WATTS @ 4 OHMS
RATED POWER 14.4 VOLTS	2 X 1500 WATTS @ 2 OHMS
RATED POWER 14.4 VOLTS	1 X 3000 WATTS @ 4 OHMS
BANDWIDTH	20 - 28KHz
X-OVER SLOPE	12 dB
VARIABLE BASS BOOST @45 HZ	12 dB
INPUT SENSITIVITY	.250MV-5V
INPUT VOLTAGE	11 - 14.4VOLTS
SIGNAL TO NOISE RATIO	>93 dB
THD AT RATED POWER	< 0.05%



